

Fisheries Independent Surveys System (FINSS)

Public User's Manual (v.4.0)



**National Marine Fisheries Service
Office of Science and Technology**

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1. Introduction

A fishery-independent survey is a systematic sampling project carried out by research vessels or contracted commercial fishing vessels for gathering biological or environmental information, primarily focused on commercial fish or protected species for stock assessments. The purpose of the Fishery-Independent Surveys System (FINSS) is to: 1) document and present National Marine Fisheries Service (NMFS) fish-independent survey information to users via web-based applications; 2) support the mission of NMFS and the Office of Science and Technology (ST); and 3) empower effective discovery, access and use of NMFS survey information. The system is updated at least once a year to keep the data up to date.

The goals of this system are:

- Develop complete characterization of NMFS survey capabilities and capacity;
- Enable gap analysis of surveys and stock assessments;
- Enable quick and accurate response to survey-related planning/budget scenarios and data calls;
- Engage and foster collaboration across regions in documenting and analyzing surveys through web services;
- Promote integration with other web interfaces, such as Data.gov, to share NMFS survey information with the public in a more cost-effective way.

The FINSS product includes user interface and reporting capability for users to view and query the database. FINSS is sponsored by ST Assessment and Monitoring Division, developed by the ST Science Information Division, and supported/contributed to by the six NMFS science centers.

1.1 Scope for This User's Manual

This manual is primarily focused on serving the public user on how to use FINSS capabilities. Since the software interface is very intuitive, a fairly high level approach is used for illustrating its operation.

1.2 Scope for This User's Manual

The system is structured in a hierarchical fashion. Proceeding from the top level down, the levels and some of the key parameters found under each is summarized as follows:

- Survey Level:
 - Survey Name
 - Science Center
 - Lab/Division
 - Survey Year
 - Survey Purpose
 - Funding Source
 - Targeted Species
- Cruise Level
 - Cruise Number
 - Cruise Start Date
 - Cruise End Date
 - Platform Type
 - Regional Ecosystem
 - Gear
 - Observation Parameters
- Station Level
 - Location Type (Point Station or Track-line)
 - Station ID
 - Lat/Lon

Some of the basic terminology used in the system is defined below:

At the survey level

| | |
|-----------------|--|
| Survey: | A descriptor of a series of similar cruises (same region, vessel type, target species, principal gear deployed, etc.). |
| Science Center: | One of the NMFS science centers (AFSC, NWFSC, SWFSC, PIFSC, NEFSC, or SEFSC) |
| Lab/Division: | Laboratory/division or facility which conducted the survey |
| Survey Year: | Calendar year when the survey was conducted |
| Survey Name: | Name defined by each science center |
| Survey Purpose: | Description of what the survey accomplished (e.g., stock assessment, seafloor mapping) |

| | |
|-------------------|--|
| Survey Frequency: | How often the survey was conducted (e.g., annually, bi-annually, quarterly, by season) |
| Funding Source: | Source of funds (e.g., NOAA corporate fund, NMFS program fund, NMFS cooperative research fund) |
| Targeted Species: | Names of the species that were targeted from the Endangered Species Act (ESA) list, Marine Mammal Protection Act (MMPA) list, or Fish Stock Sustainability Index (FSSI) list |

At the Cruise Level

| | |
|--------------------|---|
| Cruise: | A trip composed of one or more legs on a single vessel |
| Cruise Number: | Cruise ID/code used to support each particular survey |
| Cruise Start Date: | Date the ship left port for a particular survey |
| Cruise End Date: | Date the ship returned to port after a particular survey |
| Days-at-Sea: | Any calendar day where the ship is at sea, including science days, transit days, and days lost due to weather or mechanical breakdown. staging and de-staging days are not counted if the ship is not underway for a portion of those days. |
| Platform Type: | Type of platform (e.g., NOAA research vessel, charter vessel) |
| Platform Name: | Name of vessel |
| Gear: | Sampling method/device used during a cruise |

At the Station Level

| | |
|----------------|---|
| Location Type: | Category (point station or track-line) that best describes the location at which observations were made for the given survey and cruise |
| Station ID: | Station ID/code assigned by the Science Center to identify the stations |
| Begin Lat/Lon: | The Latitude/Longitude where a particular survey sampling activity started. For a “point station” location type, this is the only location value entered. |
| End Lat/Lon: | The end Latitude/Longitude that is filled in for a “track-line” location type |

2. User Interface

The user interface for the public user is straight-forward and is limited to viewing the survey data information. The user needs to select search parameters, initiate the search, and observe the survey related parameters.

There is also the capability to create tabular reports and map reports. In addition, new interactive reports functionality has been added allowing the user to filter or sort tabular reports from report data.

The application allows the user to:

- Perform survey search by supplying search parameters
 - Science Center
 - Survey Name
 - Survey Year
 - Funding Source
 - Survey Purpose
- View information for a selected survey at
 - Survey Level
 - Cruise Level
 - Station Level
- Generate a survey report
 - Map Reports
 - Tabular Reports
 - Interactive Reports

Additional details regarding the application capabilities and usage are covered in the following screens.

2.1 Access Application

For the public user operation, the user does not need a login or password. To access the application, simply perform the following:

1. Enter and click [FINSS Access link](#) in a web browser. This will produce the login screen shown in Figure 1.
2. Select the 'Visit as a Guest' button. No username or password is required.

FINSS-SI Login

FINSS - Survey Inventory 1.0

This is a NOAA computer system. This computer system, including all related equipment, networks and network devices (specifically including Internet access), are provided only for authorized U.S. Government use. This system may be monitored for all lawful purposes, including to ensure that its use is authorized, for management of the system, to facilitate protection against unauthorized access, and to verify security procedures, survivability and operational security. Unauthorized use may subject you to criminal prosecution. Evidence of unauthorized use collected during monitoring may be used for administrative, criminal or adverse action. Use of this system constitutes consent to monitoring for these purposes.

Please enter your username and password below

Username:

Password:

to Login as a User

or Visit as a Guest

Done

Figure 1 – Login Screen for FINSS – Survey Inventory

After starting up the application (with ‘Visit as a Guest’ operation), the initial screen shown in Figure 2 will be displayed.

The screenshot displays the 'Survey Inventory Records' application interface. At the top, there are tabs for 'Survey Inventory Records' and 'Survey Inventory Reports', along with links for 'Public User Manual' and 'Log In'. The main interface is divided into two sections: 'Survey Inventory Records' on the left and 'Survey' on the right. The 'Survey' section has sub-tabs for 'Survey', 'Cruise', and 'Station'. The 'Survey' sub-tab is active, showing a form with various input fields and buttons. The form includes a 'Search Criteria' section on the left with fields for 'Science Center', 'Survey Name', and 'Survey Year' (set to 2011), and 'Search' and 'Reset' buttons. The main form area contains fields for 'Science Center*', 'Survey Name*', 'Lab/Division/Facility', 'Survey Frequency', and 'Survey Year*' (set to 2011). Below these are 'Funding Source*', 'Primary Purpose*', and 'Secondary Purpose' fields, each with a 'Select' button. The 'Target Species' section includes 'ESA:', 'MMPA:', 'FSSI:', and 'Other Species:' fields, each with a 'Select' or 'Add' button. The 'Expected Species Categories:' field also has a 'Select' button. At the bottom, there is a 'Comments:' field with a character count '(Max 4000 Chars)' and '0 chars entered'. A red asterisk indicates required fields.

Figure 2 – Initial Screen for Survey Inventory

2.2 Survey Search

This survey search operation is based on the assumption that you are currently working under the ‘Survey Inventory Records’ tab (see Figure 3). If you are starting elsewhere, first select the ‘Survey Inventory Records’ button at the top of the screen.

Survey data in the application is setup in a hierarchical structure consisting of Survey, Cruise, and Station. Initially, the user must supply a Search Criteria in the left panel of the screen. There are drop-down menus like the one illustrated in Figure 3 to assist the user.

The screenshot displays a web application interface for survey search. At the top, there are two tabs: 'Survey Inventory Records' (highlighted with a red box and a red arrow) and 'Survey Inventory Reports'. Below the tabs, there are three sub-tabs: 'Survey', 'Cruise', and 'Station'. The 'Survey' sub-tab is active. On the left side, there is a 'Search Criteria' panel with a dropdown menu for 'Science Center' showing a list of options: AFSC, NEFSC, NWFSC, PFSC, SEFSC, and SWFSC. Below this list are 'Search' and 'Reset' buttons. The main form area on the right contains several input fields and buttons. A red asterisk indicates required fields. The fields include: 'Science Center:*' (dropdown), 'Survey Name:*' (text input), 'Lab/Division/Facility:' (text input), 'Survey Frequency:' (dropdown), 'Survey Year:*' (dropdown with '2011' selected), 'Funding Source:*' (text input with a 'Select' button), 'Primary Purpose:*' (text input with a 'Select' button), 'Secondary Purpose:' (text input with a 'Select' button), 'Target Species' section with 'ESA:' (text input with a 'Select' button), 'MMPA:' (text input with a 'Select' button), 'FSSI:' (text input with a 'Select' button), and 'Other Species:' (text input with an 'Add' button), 'Expected Species Categories:' (text input with a 'Select' button), and 'Comments:' (text area with a character count of 0/4000).

Figure 3 – Drop-Down Menu for Search Criteria

To perform a search for a survey, execute the steps covered in the next few pages:

1. Supply/select the search criteria for performing the search:

- Science Center
- Survey Name
- Survey Year

A sample search setup screen is shown in Figure 4. For this example a search will be performed for all surveys conducted by NEFSC for the 2007 survey year.

The screenshot shows a web application interface for 'Survey Inventory Records'. The top navigation bar includes 'Survey Inventory Records', 'Survey Inventory Reports', 'Public User Manual', and 'Log In'. The main content area is divided into a left sidebar and a right main panel.

Search Criteria (Left Sidebar):

- Science Center:
- Survey Name:
- Survey Year:
- Buttons: Search, Reset

Main Panel (Right):

* Indicates required fields

Science Center:*

Survey Name:*

Lab/Division/Facility:

Survey Frequency:

Survey Year:*

Funding Source:*

Primary Purpose:*

Secondary Purpose:

Target Species

ESA:

MMPA:

FSSI:

Other Species:

Expected Species Categories:

Comments: (Max 4000 Chars) 0 chars entered

Figure 4 – Sample Search Setup Screen

2. Select the Search button in the left panel to initiate the search.

The results for this search are displayed in the left panel. An example showing the results from the survey search is illustrated in Figure 5.

The screenshot displays the 'Survey Inventory Records' search interface. The left panel shows search criteria and results, while the right panel shows detailed search filters.

Search Criteria:

- Science Center: NEFSC
- Survey Name:
- Survey Year: 2007
- Buttons: Search, Reset

Found 16 Records

| Select | Survey Name | Year | Science Center |
|--------------------------|--|------|----------------|
| <input type="checkbox"/> | BENTHIC HABITAT STUDY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | BENTHIC HABITAT STUDY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | COOPERATIVE RESEARCH SURVEY - IBS COD | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Winter | 2007 | NEFSC |
| <input type="checkbox"/> | MARINE MAMMAL SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | MARINE MAMMAL SURVEY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | MASSACHUSETTS DMF BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS ACOUSTICS SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC BOTTOM TRAWL SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC BOTTOM TRAWL SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC MISCELLANEOUS BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC SEA SCALLOP | 2007 | NEFSC |

Search Filters (Right Panel):

- Science Center:** NEFSC
- Survey Name:**
- Lab/Division/Facility:**
- Survey Frequency:**
- Survey Year:** 2011
- Funding Source:** Select
- Primary Purpose:** Select
- Secondary Purpose:** Select
- Target Species:**
 - ESA: Select
 - MMPA: Select
 - FSSI: Select
 - Other Species: Add
- Expected Species Categories:** Select
- Comments:** (Max 4000 Chars) 0 chars entered

Figure 5 – Sample Survey Search Results

2.3 View Survey Screen Data

To view survey screen data, select the survey from the set of records in the left panel following the search operation.

Simply select the icon in the far left column that is next to the Survey Name of interest. The Survey parameters are then filled out in the right panel (under the 'Survey' tab). Figure 6 shows the filled out form resulting from this selection. Note that for the Public login, the user may only view survey parameters.

The screenshot displays the 'Survey Inventory Records' application interface. On the left, a search criteria panel shows filters for Science Center (NEFSC), Survey Name, and Survey Year (2007). Below this is a table of 16 records. The second record, 'BENTHIC HABITAT STUDY_Summer', is selected, indicated by a red box and an arrow pointing to its icon. The right panel shows the 'Survey' tab with a form containing the details of the selected survey, including Science Center, Survey Name, Lab/Division/Facility, Survey Frequency, Survey Year, Funding Source, Primary Purpose, Secondary Purpose, Target Species, Expected Species Categories, and Comments.

| Select | Survey Name | Year | Science Center |
|--------|--|------|----------------|
| | BENTHIC HABITAT STUDY_Spring | 2007 | NEFSC |
| | BENTHIC HABITAT STUDY_Summer | 2007 | NEFSC |
| | COOPERATIVE RESEARCH SURVEY - IBS COD | 2007 | NEFSC |
| | ECOSYSTEMS SURVEY_Fall | 2007 | NEFSC |
| | ECOSYSTEMS SURVEY_Spring | 2007 | NEFSC |
| | ECOSYSTEMS SURVEY_Summer | 2007 | NEFSC |
| | ECOSYSTEMS SURVEY_Winter | 2007 | NEFSC |
| | MARINE MAMMAL SURVEY_Spring | 2007 | NEFSC |
| | MARINE MAMMAL SURVEY_Summer | 2007 | NEFSC |
| | MASSACHUSETTS DMF BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| | NMFS ACOUSTICS SURVEY_Fall | 2007 | NEFSC |
| | NMFS NEFSC BOTTOM TRAWL SURVEY_Fall | 2007 | NEFSC |
| | NMFS NEFSC BOTTOM TRAWL SURVEY_Spring | 2007 | NEFSC |
| | NMFS NEFSC MISCELLANEOUS BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| | NMFS NEFSC SEA SCALLOP | 2007 | NEFSC |

Survey Details:

* indicates required fields

Science Center: NEFSC
Survey Name: BENTHIC HABITAT STUDY_Summer
Lab/Division/Facility: Environmental Processes Division
Survey Frequency: BIENNIAL
Survey Year: 2007

Funding Source: 1. NMFS program fund
Primary Purpose: 1. Habitat Assessment
Secondary Purpose: 1. EFH Assessment

Target Species
ESA:
MMPA:
FSSI:
Other Species:

Expected Species Categories:
1. Fishes-Benthic Fish
2. Invertebrate-Benthic

Comments:
(Max 4000 Chars)
0 chars entered

Figure 6 – Selected Survey

2.4 View Cruise Screen Data

Select the Cruise tab to observe the cruise related parameters for the selected survey.

The data for this particular case are shown in Figure 7. Note that there is only the one entry under Cruise List. For cases where there are two or more entries, the user may select a cruise from the Cruise List.

The screenshot displays the 'Survey Inventory Records' application interface. The 'Cruise' tab is selected, showing details for the 'BENTHIC HABITAT STUDY_Summer' survey. On the left, a table lists 16 records, with the second record, 'BENTHIC HABITAT STUDY_Summer', highlighted. The main panel on the right contains a 'Cruise List' with one entry, '200712', and a detailed form for that cruise. The form includes fields for 'Cruise Number', 'Cruise Start Date', 'Cruise End Date', 'Days at Sea', 'Platform Type', 'Select a Vessel', 'Regional Ecosystem', 'Gear', 'Oceanographic' (Physical, Biological, Chemical), and 'Biological' (Fish, Invertebrate) data.

| Select | Survey Name | Year | Science Center |
|-------------------------------------|--|------|----------------|
| <input type="checkbox"/> | BENTHIC HABITAT STUDY_Spring | 2007 | NEFSC |
| <input checked="" type="checkbox"/> | BENTHIC HABITAT STUDY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | COOPERATIVE RESEARCH SURVEY - IBS COD | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | ECOSYSTEMS SURVEY_Winter | 2007 | NEFSC |
| <input type="checkbox"/> | MARINE MAMMAL SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | MARINE MAMMAL SURVEY_Summer | 2007 | NEFSC |
| <input type="checkbox"/> | MASSACHUSETTS DMF BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS ACOUSTICS SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC BOTTOM TRAWL SURVEY_Fall | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC BOTTOM TRAWL SURVEY_Spring | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC MISCELLANEOUS BOTTOM TRAWL SURVEY | 2007 | NEFSC |
| <input type="checkbox"/> | NMFS NEFSC SEA SCALLOP SURVEY | 2007 | NEFSC |

Found 16 Records

Survey Name: BENTHIC HABITAT STUDY_Summer

Cruise List

1. [200712](#)

* indicates required fields

Cruise Number: 200712

Cruise Start Date: 08/16/2007 (mm/dd/yyyy)

Cruise End Date: 08/25/2007 (mm/dd/yyyy)

Days at Sea: 10 If left blank, the system will calculate it.

Platform Type: Fishery Survey Vessel (FSV)

Select a Vessel: Albatross IV

or Add a Vessel:

Regional Ecosystem

Ecosystem: 1. Northeast Shelf

Gear

Gear: 1. 36 Yankee Trawl

Oceanographic

Physical:

- 1. Air Pressure: Sea Surface
- 2. Air Temperature: Surface
- 3. Beaufort Sea State Scale (wind Speed, visibility)
- 4. Depth
- 5. Ocean Waves: Height
- 6. Salinity: Surface
- 7. Weather Condition
- 8. Wind: Surface, Direction
- 9. Wind: Surface, Speed

Biological:

Chemical:

Biological

Fish:

- 1. Age
- 2. Gender
- 3. Length/Morphometrics
- 4. Maturity
- 5. Number or Counts
- 6. Species
- 7. Stomach (Content, Volume, Weight)
- 8. Weight

Invertebrate:

- 1. Age
- 2. Gender
- 3. Length/Morphometrics

Figure 7 – Cruise Information for the Selected Survey

2.5 View Station Screen Data

Select the Station tab to observe the Station data for the selected survey.

The station information for this selected survey is illustrated in Figure 8. In this case the Location Type is Track-Line where both Begin Lat/Lon and End Lat/Lon values are listed out for the stations.

The screenshot displays the 'Station' tab in the 'Survey Inventory Reports' section. The search criteria on the left are set to Science Center: NEFSC, Survey Name: BENTHIC HABITAT STUDY_Summer, and Survey Year: 2007. The 'Found 16 Records' list shows the selected survey highlighted. The main table, titled 'Cruise: 200712', provides detailed station data for the 'BENTHIC HABITAT STUDY_Summer' survey.

| Station ID | Location Type | Begin Lat | Begin Lon | End Lat | End Lon |
|------------|---------------|-----------|------------|-----------|------------|
| 15 | Track-Line | 39.407263 | -72.897183 | 39.400375 | -72.871687 |
| 20 | Track-Line | 40.673038 | -70.211822 | 40.684327 | -70.18819 |
| 24 | Track-Line | 40.694293 | -70.248058 | 40.700168 | -70.221165 |
| 61 | Track-Line | 41.48737 | -66.773202 | 41.490595 | -66.800942 |
| 6 | Track-Line | 39.3665 | -72.922718 | 39.355572 | -72.900202 |
| 11 | Track-Line | 39.386197 | -72.865978 | 39.37387 | -72.843278 |
| 5 | Track-Line | 39.372867 | -72.919865 | 39.361698 | -72.897687 |
| 7 | Track-Line | 39.387258 | -72.88515 | 39.373503 | -72.864385 |
| 8 | Track-Line | 39.391057 | -72.879075 | 39.376795 | -72.859485 |
| 9 | Track-Line | 39.385182 | -72.886627 | 39.371803 | -72.863532 |
| 10 | Track-Line | 39.388835 | -72.863193 | 39.377103 | -72.839392 |
| 12 | Track-Line | 39.389935 | -72.861113 | 39.378265 | -72.837767 |
| 13 | Track-Line | 39.410785 | -72.904923 | 39.404322 | -72.880205 |
| 14 | Track-Line | 39.413922 | -72.899417 | 39.406355 | -72.874007 |
| 16 | Track-Line | 39.673053 | -72.439925 | 39.667655 | -72.43038 |
| 17 | Track-Line | 39.661995 | -72.402085 | 39.66284 | -72.415388 |
| 18 | Track-Line | 40.681125 | -70.205195 | 40.692742 | -70.182365 |
| 19 | Track-Line | 40.682265 | -70.209037 | 40.693937 | -70.184287 |
| 21 | Track-Line | 40.696918 | -70.246493 | 40.703243 | -70.220728 |
| 22 | Track-Line | 40.698085 | -70.243825 | 40.703472 | -70.218323 |
| 25 | Track-Line | 40.721967 | -70.19897 | 40.711848 | -70.174467 |
| 26 | Track-Line | 40.721467 | -70.204688 | 40.71121 | -70.179417 |
| 35 | Track-Line | 41.359277 | -69.171028 | 41.340513 | -69.159115 |
| 36 | Track-Line | 41.356023 | -69.178872 | 41.33768 | -69.166217 |
| 37 | Track-Line | 41.366505 | -69.183888 | 41.347072 | -69.172657 |
| 38 | Track-Line | 41.335738 | -69.13202 | 41.316565 | -69.119693 |

Figure 8 – Station Information for the Selected Survey

Another example for Station information for a selected survey is shown in Figure 9. In this particular case the Location Type is Point where only Begin Lat/Lon values are listed for the stations.

Survey Inventory Records | Survey Inventory Reports

Public User Manual | Log In

Survey Inventory Records

Search Criteria

Science Center: SWFSC

Survey Name:

Survey Year: 2006

Search
Reset

Found 15 Records

| Select | Survey Name | Year | Science Center |
|--------|--|------|----------------|
| | CalCOFI_Fall | 2006 | SWFSC |
| | CalCOFI_Spring | 2006 | SWFSC |
| | CalCOFI_Summer | 2006 | SWFSC |
| | EFH juvenile rockfish | 2006 | SWFSC |
| | Juvenile Rockfish | 2006 | SWFSC |
| | Mako, Blue Fin Juvenile Shark | 2006 | SWFSC |
| | PacOOS - Cent CA (IMBARI) | 2006 | SWFSC |
| | PacOOS - North CA (HSU) | 2006 | SWFSC |
| | STAR - Stenela Abundance Research (Ship 1/Ship 2) | 2006 | SWFSC |
| | STAR-LITE - Stenela Abundance Research Line Transect and Ecosystem | 2006 | SWFSC |
| | Sardine (northern portion) | 2006 | SWFSC |
| | Sardine (southern portion) | 2006 | SWFSC |
| | Thresher Shark | 2006 | SWFSC |
| | U.S. AMLR Program | 2006 | SWFSC |
| | White Abalone | 2006 | SWFSC |

Found 15 Records

Survey

Cruise

Station

Survey Name: CalCOFI_Summer

Cruise: 0607NH

[Template to prepare Station Location Data](#)

Cruise List

1. [0607NH](#)

| Station ID | Location Type | Begin Lat | Begin Lon | End Lat | End Lon |
|------------|---------------|-------------|--------------|---------|---------|
| | Point | 32.58055556 | -122.8194444 | | |
| | Point | 32.91666667 | -122.1361111 | | |
| | Point | 33.25555556 | -121.4527778 | | |
| | Point | 33.58333333 | -120.7666667 | | |
| | Point | 33.75 | -120.4138889 | | |
| | Point | 33.88611111 | -120.1333333 | | |
| | Point | 34.18611111 | -119.5194444 | | |
| | Point | 34.15555556 | -121.1555556 | | |
| | Point | 33.81666667 | -121.8416667 | | |
| | Point | 29.85277778 | -123.5861111 | | |
| | Point | 30.425 | -124.0083333 | | |
| | Point | 30.75277778 | -123.3333333 | | |
| | Point | 31.08333333 | -122.6583333 | | |
| | Point | 31.41666667 | -121.9916667 | | |
| | Point | 31.75 | -121.3166667 | | |
| | Point | 32.41666667 | -119.9638889 | | |
| | Point | 32.92222222 | -118.9361111 | | |
| | Point | 33.18611111 | -118.3888889 | | |
| | Point | 33.25277778 | -118.25 | | |
| | Point | 33.41666667 | -117.9222222 | | |
| | Point | 33.48333333 | -117.7694444 | | |
| | Point | 33.50833333 | -117.7555556 | | |
| | Point | 33.67222222 | -118.0833333 | | |
| | Point | 33.88333333 | -118.4527778 | | |
| | Point | 33.89444444 | -118.4944444 | | |
| | Point | 33.82277778 | -118.6305556 | | |

Figure 9 – Station Information for another Selected Survey Example

3. Survey Reports

Survey reports include table report, interactive report and map report. For direct public accesses for tabular reporting and map reporting functionalities, see FINSS Tabular Reporting Quick Start Guide and FINSS Tabular Reporting Quick Start Guide, located at FINSS Homepage.

If access from the Survey Record Interface, select the ‘Survey Inventory Reports’ button at the top of the screen as shown in Figure 10.

The screenshot displays the 'Survey Record Interface' web application. At the top, there are two tabs: 'Survey Inventory Records' and 'Survey Inventory Reports'. The 'Survey Inventory Reports' tab is highlighted with a red box, and a red arrow points to it from above. Below the tabs, there are three sub-tabs: 'Survey', 'Cruise', and 'Station'. The 'Survey' sub-tab is active. On the left side, there is a 'Search Criteria' section with dropdown menus for 'Science Center', 'Survey Name', 'Survey Year', and 'Sea'. Below these are 'Sea' and 'Reset' buttons. The main content area contains several form fields with red asterisks indicating required fields. These include 'Science Center', 'Survey Name', 'Lab/Division/Facility', 'Survey Frequency', and 'Survey Year'. Below these are 'Funding Source', 'Primary Purpose', and 'Secondary Purpose', each with a 'Select' button. There is a 'Target Species' section with 'ESA', 'MMPA', and 'FSSI' fields, each with a 'Select' button, and an 'Other Species' field with an 'Add' button. Below that is an 'Expected Species Categories' field with a 'Select' button. At the bottom is a 'Comments' section with a text area and a 'Select' button. The bottom of the screen shows a Windows taskbar with an 'Internet' browser icon and a 100% zoom level.

Figure 10 – Survey Record Interface

3.1 Select Parameters

To generate reports, first set up the Report Criteria by selecting parameters for:

- Survey Year
- Science Center
- Survey Name
- Funding Source
- Purpose

A sample setup (SEFSC 2007) is shown in Figure 11.

The screenshot displays the 'Survey Inventory Reports' web application interface. At the top, there are tabs for 'Survey Inventory Records' and 'Survey Inventory Reports', with the latter being active. In the top right corner, there are links for 'Public User Manual' and 'Log In'. Below the tabs, the 'Parameters' section contains five dropdown menus, each with a label to its left:

- Year(s):** A dropdown menu with options: '** All Years **', 2004, 2005, 2006, 2007 (selected), 2008, 2009, and 2010.
- Science Center(s):** A dropdown menu with options: '** All Centers **', Alaska Fisheries Science Center, Northeast Fisheries Science Center, Northwest Fisheries Science Center, Pacific Islands Fisheries Science Center, Southeast Fisheries Science Center (selected), and Southwest Fisheries Science Center.
- Survey Name(s):** A dropdown menu with options: '** All Surveys **', Atlantic Stripped Bass Tagging_Winter, Fish assemblages of western and southwestern Puerto Rico, GULFSPAN_database, InShore Shark Longline, Inshore Shark Longline_Spring, Inshore Shark Longline_Winter, Longline Shark/Red Snapper_Summer, Mangrove_studies, and Marine Mammals Survey_Summer.
- Funding(s):** A dropdown menu with options: '** All Funding Sources **', Base Fund, Congressional Earmarks/Pass-through fund, Contract Fund, and Fund from External Agencies.
- Purpose(s):** A dropdown menu with options: '** All Purposes **', Animal Movements, Camp Support, Climate Observation, and Coral Reef Benthic Assessment.

At the bottom right of the parameter selection area, there is a button labeled 'Generate Report', which is highlighted with a red rectangular box and a red arrow pointing to it.

Figure 11 – Setup for Survey Report

3.2 Map Report

To produce a map, select the ‘Generate Report’ button at the bottom of the parameter page (See Figure 11). After you zoom in closer, you should observe the sample Map Report from the supplied survey criteria (SEFSC 2007 in this example) shown in Figure 12.

There are multiple component overlays for this map. One is the Exclusive Economic Zone (EEZ) with an outline indicated for the region. Another component is the “heat map” display, which shows the observation density for the currently selected stations, calculated for a grid with a cell size of $\frac{1}{4}$ degree. These cells are color-coded using a range of colors indicated by the scale in the right panel, where the “temperature” is proportional to station density.

The EEZ may be toggled on/off by checking or unchecking the box next to ‘US EEZ’. Similarly, the heat map may be toggled by checking or unchecking the box for ‘Survey stations within selected area’.

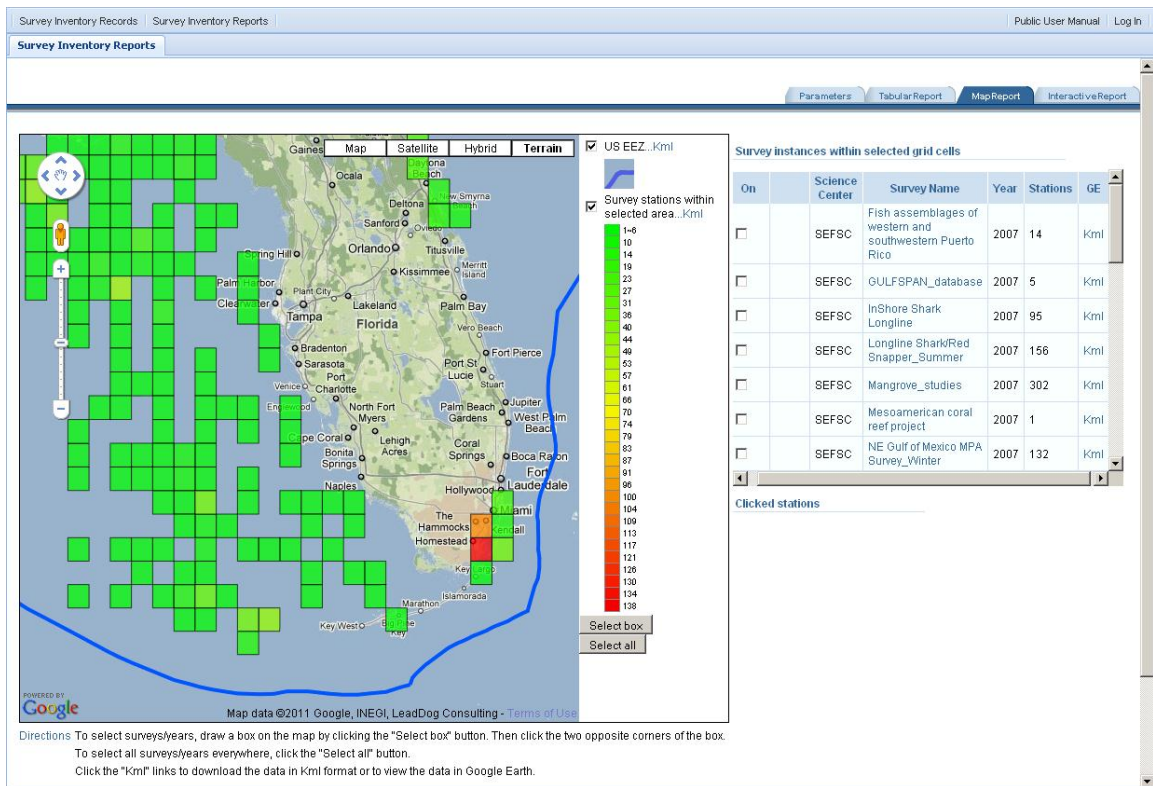


Figure 12 - Sample Map Report

To drill down for additional detailed station information, you may define an area of interest by drawing a box on the map. Only those surveys/stations within the box will be available as layers. If you want to return all survey instances that match your parameters, click the 'Select All' button.

The steps for creating a Select Box are:

- Click the 'Select box' button
- Click one corner of the box
- Click on the opposite corner of the desired box

An example is shown in Figure 13 where the first corner has been selected and a marker has been displayed on the map.

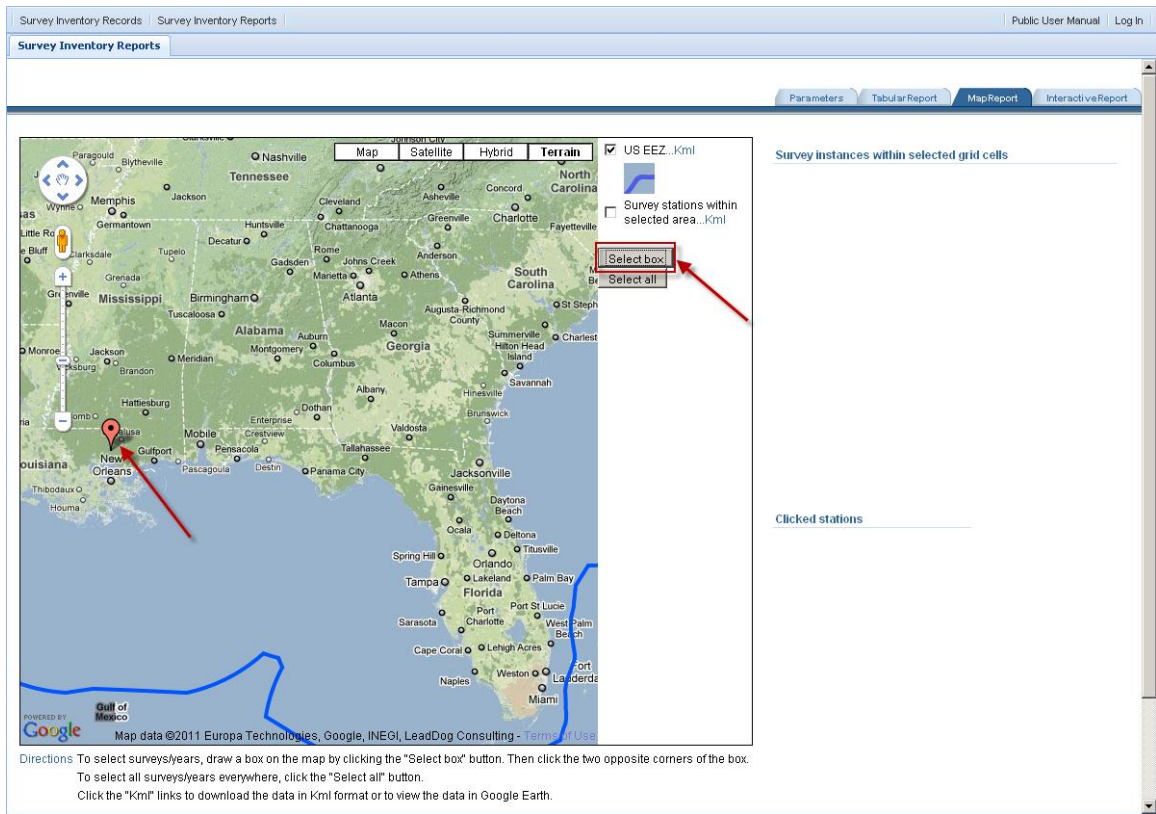


Figure 13 - Map: Setup for Select Box

After the second corner has been selected, the Select Box will be created as illustrated in the example shown in Figure 14. A table for the ‘Survey instances within selected grid cells’ is also displayed in the right panel.

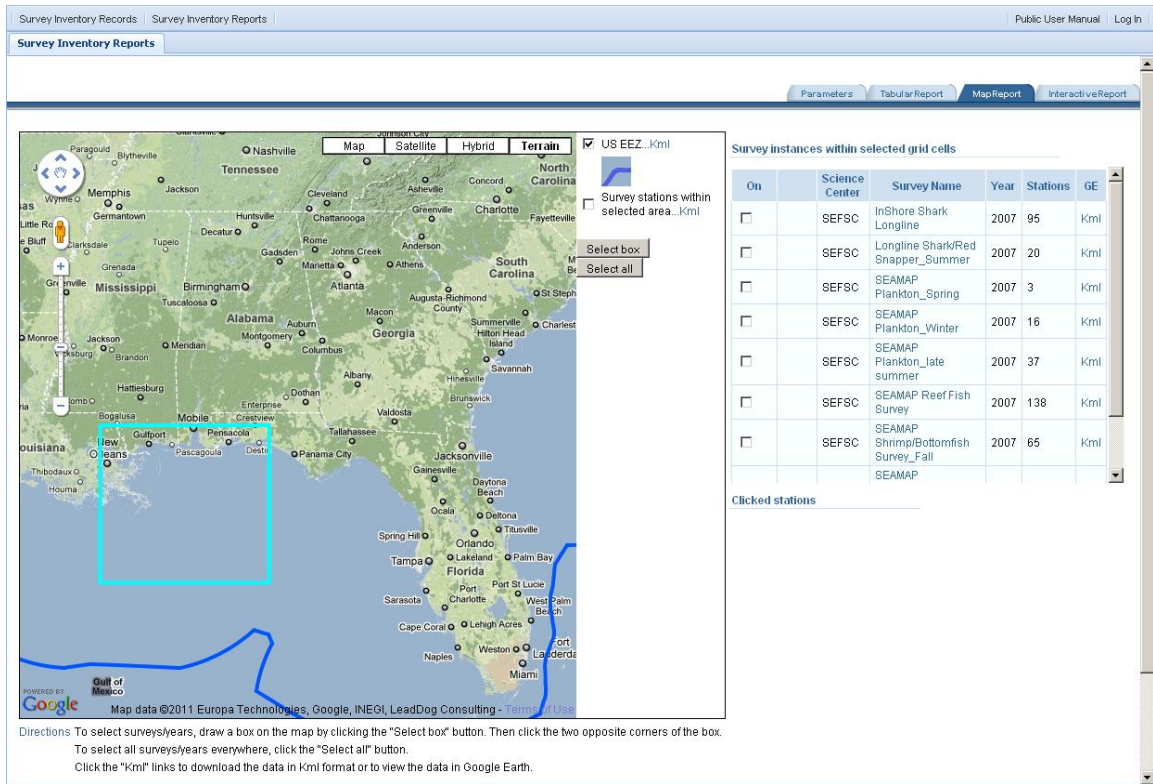


Figure 14 - Map: Select Box Defined

To turn on the stations for individual surveys/years, click on each check-box of interest under the 'On' column. Each survey instance that you turn on gets a different color as shown on the map and the corresponding table entry. You may display up to eight survey instances at one time. An example with four survey instances is shown in Figure 15.

To download the geospatial data for a survey instance in Kml format or to view the data in Google Earth, click on the 'Kml' link for the survey instance.

Survey Inventory Reports

Parameters Tabular Report Map Report Interactive Report

Map Satellite Hybrid Terrain ☒ US EEZ .Kml ☐ Survey stations within selected area .Kml

Select box Select all

Survey instances within selected grid cells

| On | Science Center | Survey Name | Year | Station | GE |
|-------------------------------------|----------------|--------------------------------------|------|---------|-----|
| <input checked="" type="checkbox"/> | SEFSC | InShore Shark Longline | 2007 | 95 | Kml |
| <input type="checkbox"/> | SEFSC | Longline Shark/Red Snapper_Summer | 2007 | 20 | Kml |
| <input type="checkbox"/> | SEFSC | SEAMAP Plankton_Spring | 2007 | 3 | Kml |
| <input checked="" type="checkbox"/> | SEFSC | SEAMAP Plankton_Winter | 2007 | 16 | Kml |
| <input type="checkbox"/> | SEFSC | SEAMAP Plankton_late summer | 2007 | 37 | Kml |
| <input checked="" type="checkbox"/> | SEFSC | SEAMAP Reef Fish Survey | 2007 | 138 | Kml |
| <input checked="" type="checkbox"/> | SEFSC | SEAMAP Shrimp/Bottomfish Survey_Fall | 2007 | 65 | Kml |
| | | SEAMAP | | | |

Clicked stations

Map data ©2011 Google, INEGI - Terms of Use

Directions To select surveys/years, draw a box on the map by clicking the "Select box" button. Then click the two opposite corners of the box. To select all surveys/years everywhere, click the "Select all" button. Click the "Kml" links to download the data in Kml format or to view the data in Google Earth.

Figure 15 - Map: Survey Instances inside a Select Box

To show the attributes of an individual station or stations, click on the station (or stations) on the map. The attributes of those stations will show up in the window on the right side of the screen and the selected stations will be highlighted on the map. If the station has a beginning and ending point (as in trawl), a black line will also be displayed connecting these two points. This feature helps users find out information about overlapping stations. An example for ‘SEAMAP Reef Fish Survey’ is illustrated in Figure 16.

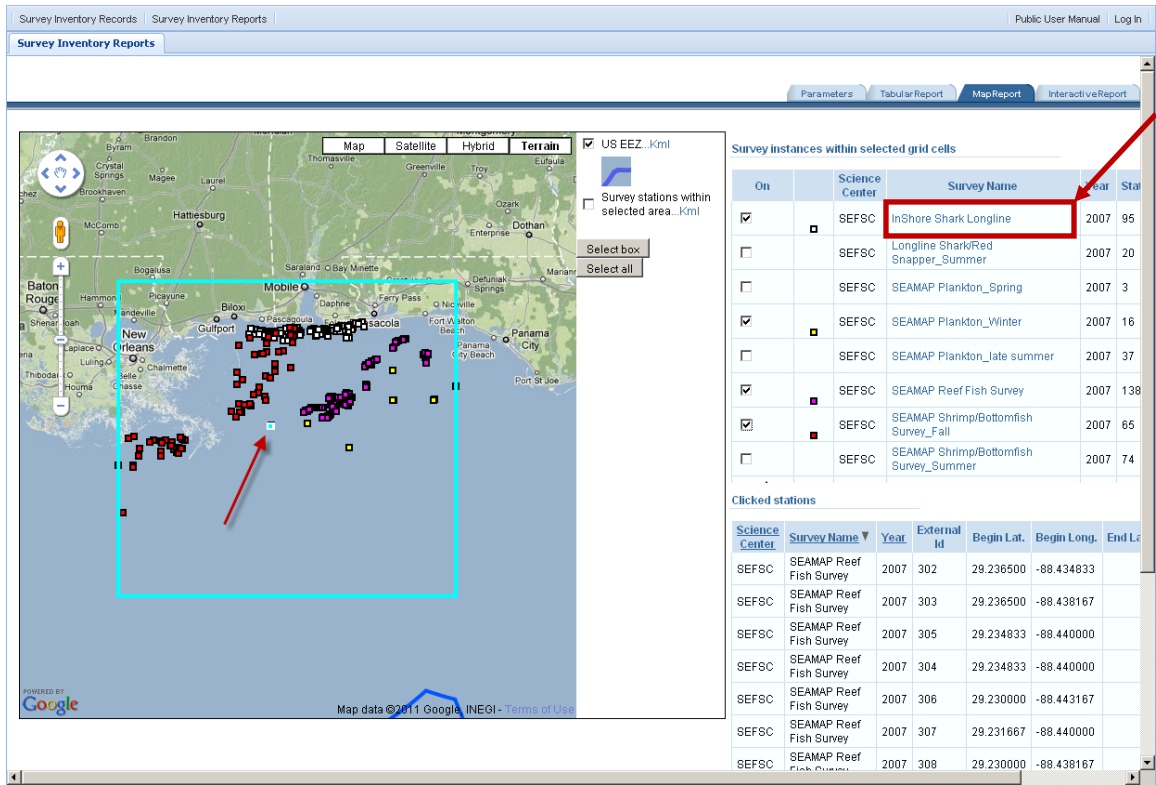


Figure 16 - Map: Display Attributes for Stations

In the list of survey instances that meet the filter parameters, click on the survey name (see Figure 16), and a summary of the survey's attributes will be displayed in a new window as shown in Figure 17.

The screenshot shows a web application window titled "FINSS-SI-Main" with a sub-tab "Survey Detail". The main content area is divided into sections: "Survey", "Contacts", and "Survey Instance Detail".

Survey Section:

- Survey Id: 146
- Science Center: SEFSC
- Survey Name: SEAMAP Reef Fish Survey
- Survey Description:
- Survey Effective Date:
- Survey End Date:

Contacts Section:

| First Name | Middle Name | Last Name | Phone | Phone Ext | Email |
|------------|-------------|------------|----------------|-----------|-------------------------|
| Lee | M. | Weinberger | 3053614287 - | | lee.weinberger@noaa.gov |
| Mark | B. | Mcduff | 2287624591 178 | | mark.mcduff@noaa.gov |

Survey Instance Detail Section:

| Survey Instance Id | Species Category | Year | Science Center | Management Act | Gear | Days At Sea | Stations Per Regional Ecosystem | Number Of Cruises | Observation Names |
|--------------------|------------------|------|----------------|----------------|--------------|-------------|---------------------------------|-------------------|--|
| 189 | - | 2007 | SEFSC | FSSI | Video Arrays | 78 | Gulf of Mexico: 397 | 2 | Biological,Habitat,Oceanographic,Protected Species |

The bottom of the window shows a "Done" button and a lock icon.

Figure 17 - Map: Summary Information for Survey

In the above example, a Select Box was created to define an area of interest. Alternately, the Select All button could be used to return all survey instances that match the chosen parameters. Follow the same steps as above: 1) Turn on the stations for individual survey instances and 2) Click on stations to show attributes. The resulting sample display is shown in Figure 18.

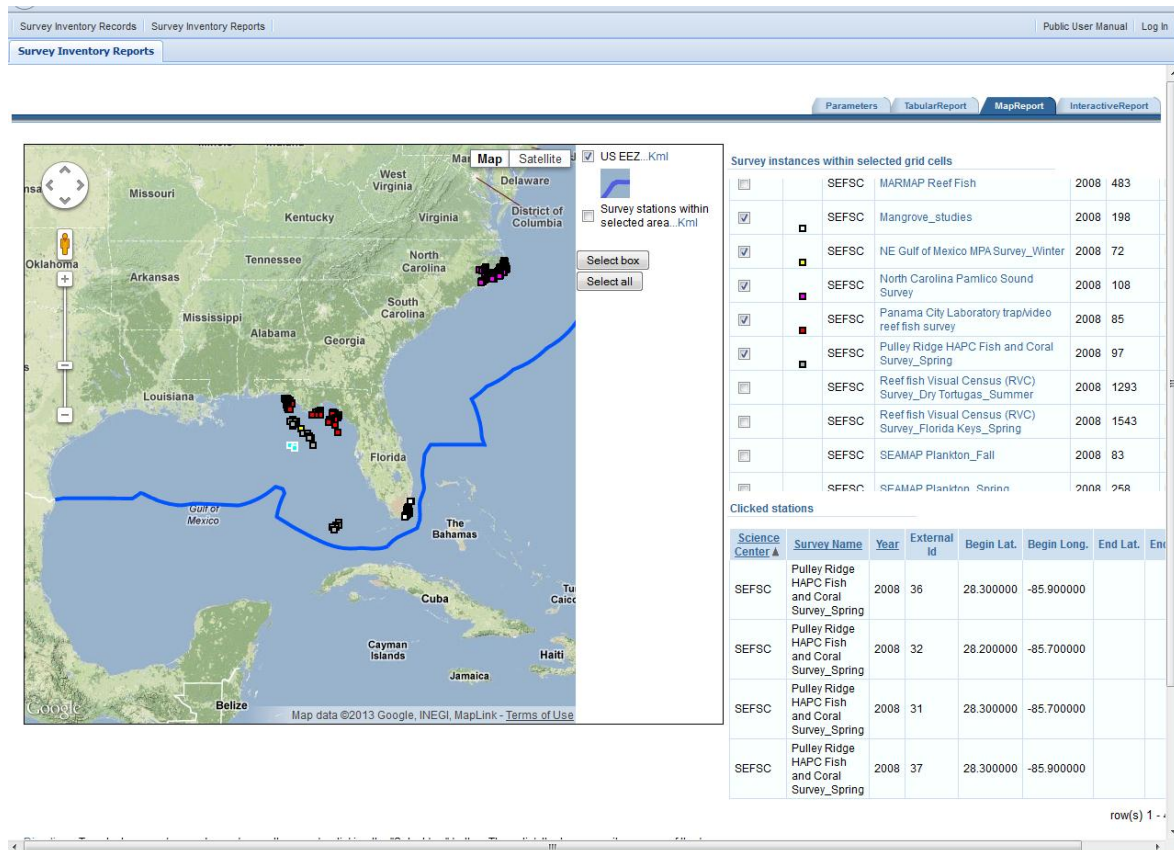


Figure 18 - Map: Show Station Attributes

3.3 Table Report

To produce a table report, select the “Generate Report” button as shown in Figure 11. This will create the sample report shown in Figure 19.

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














Parameters

Tabular Report

Map Report

Interactive Report

Tabular Report

| Click For Detail | Instance | Science Center | Survey Name | Year | Purposes | Fundings |
|---|----------|----------------|--|------|---|---|
|  | 185 | SEFSC | Tortugas Ecological Reserve Survey_Summer | 2007 | Documtent Spawning Aggregations,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NOAA Coral Reef Conservation Program |
|  | 189 | SEFSC | SEAMAP Reef Fish Survey | 2007 | EFH Assessment,Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund |
|  | 135 | SEFSC | Panama City Laboratory trap/video reef fish survey | 2007 | Habitat Assessment | NMFS program fund |
|  | 153 | SEFSC | USVI Larval Fish Cruise Surveys_Spring | 2007 | Habitat Assessment,Larval Reef Fisheries Oceanography | NOAA Coral Reef Conservation Program |
|  | 122 | SEFSC | Mesoamerican coral reef project | 2007 | Habitat Assessment,Larval Reef Fisheries Oceanography | NOAA Coral Reef Conservation Program |
|  | 147 | SEFSC | NE Gulf of Mexico MPA Survey_Winter | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
|  | 132 | SEFSC | Pulley Ridge HAPC Fish and Coral Survey_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
|  | 196 | SEFSC | U.S. South Atlantic MPA Survey_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
|  | 188 | SEFSC | Fish assemblages of western and southwestern Puerto Rico | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function),Reef Fish and Coral Monitoring,Research | NOAA Coral Reef Conservation Program |
|  | 137 | SEFSC | Reef fish Visual Census (RVC) Survey_Florida Keys_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function),Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund |
|  | 164 | SEFSC | Saint Andrew Bay Juvenile Reef Fish Survey | 2007 | Habitat Assessment,Research | NMFS program fund |
|  | 181 | SEFSC | SEAMAP Plankton_late summer | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
|  | 190 | SEFSC | SEAMAP Shrimp/Bottomfish Survey_Fall | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
|  | 204 | SEFSC | SEAMAP Shrimp/Bottomfish Survey_Summer | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
|  | 111 | SEFSC | SEAMAP Plankton_Spring | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | NMFS cooperative research fund,NMFS program fund |

row(s) 1 - 15 of 25

Next

Figure 19 - Sample Table Report

To produce more information on a particular survey, click the icon in the left column next to the instance number. An example for Instance 204 is shown in Figure 20.

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| | | | | | | |
|--|-----|-------|--|------|---|---|
| | 135 | SEFSC | Panama City Laboratory trap/video reef fish survey | 2007 | Habitat Assessment | NMFS program fund |
| | 153 | SEFSC | USVI Larval Fish Cruise Surveys_Spring | 2007 | Habitat Assessment,Larval Reef Fisheries Oceanography | NOAA Coral Reef Conservation Program |
| | 122 | SEFSC | Mesoamerican coral reef project | 2007 | Habitat Assessment,Larval Reef Fisheries Oceanography | NOAA Coral Reef Conservation Program |
| | 147 | SEFSC | NE Gulf of Mexico MPA Survey_Winter | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
| | 132 | SEFSC | Pulley Ridge HAPC Fish and Coral Survey_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
| | 196 | SEFSC | U.S. South Atlantic MPA Survey_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function) | NMFS program fund |
| | 188 | SEFSC | Fish assemblages of western and southwestern Puerto Rico | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function),Reef Fish and Coral Monitoring,Research | NOAA Coral Reef Conservation Program |
| | 137 | SEFSC | Reef fish Visual Census (RVC) Survey_Florida Keys_Spring | 2007 | Habitat Assessment,MPA Assessment (protected diversity, abundance of marine life, protected structure, function),Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund |
| | 164 | SEFSC | Saint Andrew Bay Juvenile Reef Fish Survey | 2007 | Habitat Assessment,Research | NMFS program fund |
| | 181 | SEFSC | SEAMAP Plankton_late summer | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
| | 190 | SEFSC | SEAMAP Shrimp/Bottomfish Survey_Fall | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
| | 204 | SEFSC | SEAMAP Shrimp/Bottomfish Survey_Summer | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | Congressional Earmarks/Pass-through fund,NMFS cooperative research fund,NMFS program fund |
| | 111 | SEFSC | SEAMAP Plankton_Spring | 2007 | Habitat Assessment,Research,Stock Assessment (population size, distribution, age profile, recruitment) | NMFS cooperative research fund,NMFS program fund |

row(s) 1 - 15 of 25

Next

Survey Instance Detail

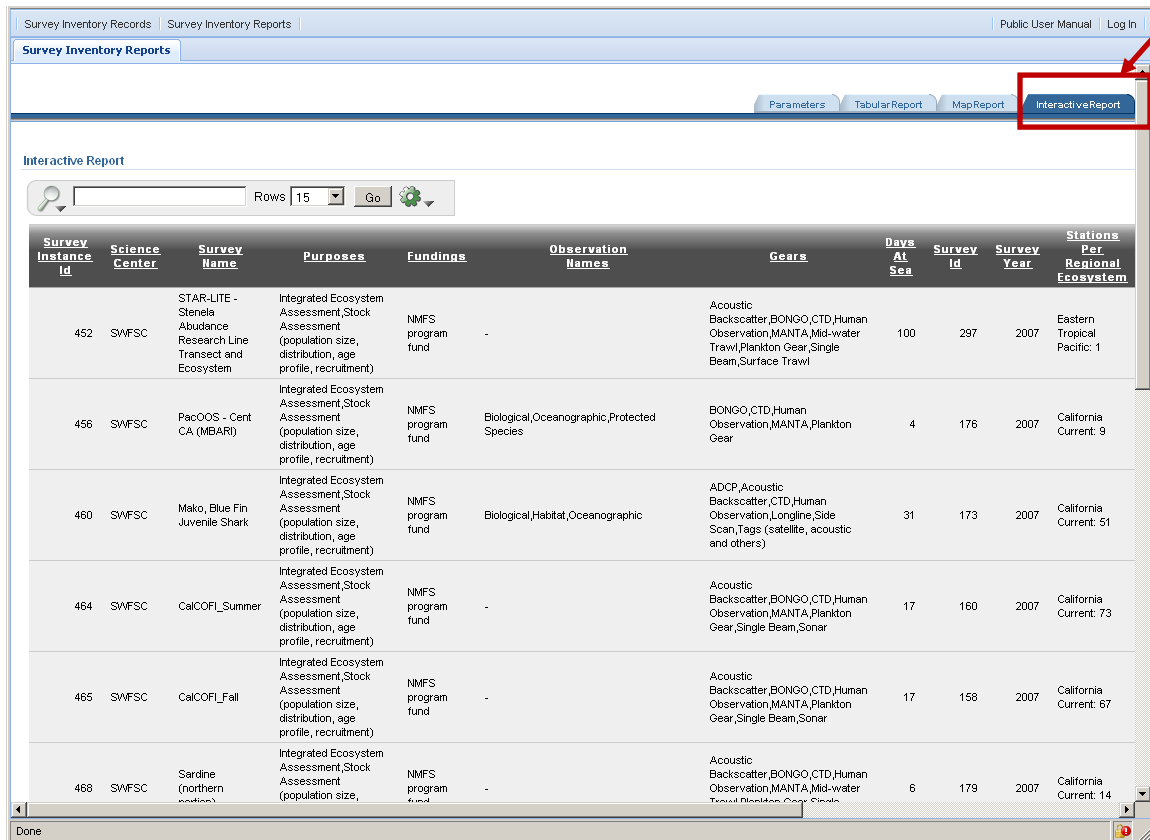
| Survey Instance Id | Species Category | Year | Science Center | Management Act | Gear | Days At Sea | Stations Per Regional Ecosystem | Number Of Cruises | Observation Names |
|--------------------|--|------|----------------|----------------|---|-------------|---------------------------------|-------------------|--|
| 204 | Invertebrate-Benthic,Fishes-Benthic Fish,Phytoplankton | 2007 | SEFSC | - | BONGO,Bottom Trawl,CTD,Grab Sampler,Human Observation,Plankton Gear | 86 | Gulf of Mexico: 407 | g | Biological,Habitat,Oceanographic,Protected Species |

1 - 1

Figure 20 - Survey Instance Detail

3.4. Interactive Report

Another type of tabular report that FINSS produces is the interactive report. Select the 'Interactive Report' tab to bring up this feature as shown in Figure 21.



Interactive Report

Rows: 15 Go

| Survey Instance Id | Science Center | Survey Name | Purposes | Fundings | Observation Names | Gears | Days At Sea | Survey Id | Survey Year | Stations Per Regional Ecosystem |
|--------------------|----------------|--|---|-------------------|--|--|-------------|-----------|-------------|---------------------------------|
| 452 | SWFSC | STAR-LITE - Stenela Abundance Research Line Transect and Ecosystem | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | - | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Mid-water Trawl, Plankton Gear, Single Beam, Surface Trawl | 100 | 297 | 2007 | Eastern Tropical Pacific: 1 |
| 456 | SWFSC | PacOOS - Cent CA (MBARI) | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | Biological, Oceanographic, Protected Species | BONGO, CTD, Human Observation, MANTA, Plankton Gear | 4 | 176 | 2007 | California Current: 9 |
| 460 | SWFSC | Mako, Blue Fin Juvenile Shark | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | Biological, Habitat, Oceanographic | ADCP, Acoustic Backscatter, CTD, Human Observation, Longline, Side Scan, Tags (satellite, acoustic and others) | 31 | 173 | 2007 | California Current: 51 |
| 464 | SWFSC | CalCOFI_Summer | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | - | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Plankton Gear, Single Beam, Sonar | 17 | 160 | 2007 | California Current: 73 |
| 465 | SWFSC | CalCOFI_Fall | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | - | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Plankton Gear, Single Beam, Sonar | 17 | 158 | 2007 | California Current: 67 |
| 468 | SWFSC | Sardine (northern section) | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | - | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Mid-water Trawl, Plankton Gear, Single Beam | 6 | 179 | 2007 | California Current: 14 |

Done

Figure 21 - Interactive Report Screen

The Interactive Report feature allows the user to sort, filter, highlight, or download results. The number of rows can be changed to alter the number of records displayed at a given time. Also, there is an option to select columns for the report.

To display a menu of interactive options, select the icon (cogwheel with down-arrow) at the top of the screen. The resulting drop-down menu of user options is illustrated in Figure 22.

The screenshot shows the 'Interactive Report' interface. At the top, there are tabs for 'Parameters', 'Tabular Report', 'Map Report', and 'Interactive Report'. Below the tabs, there is a search bar with a 'Go' button and a 'Rows' dropdown set to '15'. An 'Actions' button is also present. A dropdown menu is open, showing the following options: 'Select Columns', 'Filter', 'Rows Per Page', 'Format', 'Flashback', 'Reset', 'Help', and 'Download'. The background table displays survey data with the following columns: 'Survey Instance Id', 'Science Center', 'Survey Name', 'Purposes', 'Observation Names', 'Gears', 'Days At Sea', 'Survey Id', and 'Survey Year'.

| Survey Instance Id | Science Center | Survey Name | Purposes | Observation Names | Gears | Days At Sea | Survey Id | Survey Year |
|--------------------|----------------|-------------------------------------|---|---|--|-------------|-----------|-------------|
| 300 | NEFSC | NMFS ACOUSTICS SURVEY_Fall | Develop and Test New Technology, Ecosystem Assessment, Population Monitoring, Research, Assessment (population size, distribution, age recruitment) | Habitat, Oceanographic | ADCP, Acoustic Backscatter, Acoustic Recorders, Binoculars, CTD, Digital Camera, EK-60 Echosounder, Human Observation, Hydroacoustics, Mid-water Trawl, Temperature Depth Recorders (TDRs), Video Arrays | 40 | 79 | 2010 |
| 1000 | SEFSC | Mangrove_studies | Habitat Assessment, Stock Assessment (population size, distribution, age recruitment) | Habitat, Oceanographic | Human Observation | 29 | 233 | 2010 |
| 1100 | SEFSC | NE Gulf of Mexico MPA Survey_Winter | Habitat Assessment, Stock Assessment (protected diversity, abundance of marine life, protected structure, function) | Biological, Habitat, Oceanographic, Protected Species | CTD, ROV, Video Arrays | 11 | 136 | 2010 |
| 102 | SEFSC | Mangrove_studies | Habitat Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | Biological, Habitat, Oceanographic | Human Observation | 30 | 233 | 2010 |
| 105 | SEFSC | SEAMAP Reef Fish Survey | EFH Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | Biological, Habitat, Oceanographic, Protected Species | Fish Traps, Video Arrays | 73 | 146 | 2010 |
| 108 | SEFSC | Marine Mammals Survey_Summer | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | - | - | - | 133 | 2010 |

Figure 22 - Interactive Report Menu Options

As an illustration of one of the possible operations, a simple example is presented here showing the Filter option. In this case the list of survey instances is filtered for Survey Names containing 'rockfish'. The setup for this is illustrated in Figure 23. After the 'Apply' button is selected, the results shown in Figure 24 will be displayed.

Survey Inventory Reports

Parameters | Tabular Report | Map Report | **Interactive Report**

Interactive Report

Rows: 15 Go

Filter

Column: Survey Name Operator: contains Expression: rockfish

Cancel Apply

| Survey Instance Id | Science Center | Survey Name | Purposes | Fundings | Observation Names | Gears | Days At Sea | Survey Id | Survey Year | Stations Per Regional Ecosystem |
|--------------------|----------------|---|---|---------------------|------------------------------------|--|-------------|-----------|-------------|---------------------------------|
| 452 | SMFSC | STAR-LITE - Stenella Abundance Research Line Transect and Ecosystem | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund - | | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Mid-water Trawl, Plankton Gear, Single Beam, Surface Trawl | 100 | 297 | 2007 | Eastern Tropical Pacific: 1 |
| 460 | SMFSC | Mako, Blue Fin Juvenile Shark | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | Biological, Habitat, Oceanographic | ADCP, Acoustic Backscatter, CTD, Human Observation, Longline, Side Scan, Tags (satellite, acoustic and others) | 31 | 173 | 2007 | California Current: 51 |
| 468 | SMFSC | Sardine (northern portion) | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund - | | Acoustic Backscatter, BONGO, CTD, Human Observation, MANTA, Mid-water Trawl, Plankton Gear, Single Beam, Sonar | 6 | 179 | 2007 | California Current: 14 |
| 481 | SMFSC | EFH juvenile rockfish | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund - | | - | - | 166 | 2007 | - |

Done

Figure 23 - Interactive Report Setup for Filter Operation

| Survey Inventory Reports | | | | | | | | |
|---|----------------|--|---|--------------------------------|---|---|-------------|-----------|
| Parameters Tabular Report Map Report Interactive Report | | | | | | | | |
| Interactive Report | | | | | | | | |
| <input type="text"/> Rows <input type="text" value="15"/> Go | | | | | | | | |
| <input checked="" type="checkbox"/> Survey Name contains 'rockfish' <input checked="" type="checkbox"/> | | | | | | | | |
| Survey Instance Id | Science Center | Survey Name | Purposes | Fundings | Observation Names | Gears | Days At Sea | Survey Id |
| 508 | SWFSC | Juvenile Rockfish | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | Biological, Habitat, Oceanographic, Protected Species | Acoustic Backscatter, BONGO, CTD, Human Observation, Mid-water Trawl, Plankton Gear | 43 | 168 |
| 481 | SWFSC | EFH Juvenile rockfish | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | - | - | - | 166 |
| 495 | SWFSC | COAST - Southern CA Bight Rockfish (ROV) | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS cooperative research fund | Biological, Habitat, Oceanographic, Protected Species | Acoustic Backscatter, ROV, Single Beam | 32 | 289 |
| 509 | SWFSC | COAST - Southern CA Bight Rockfish (acoustics) | Integrated Ecosystem Assessment, Stock Assessment (population size, distribution, age profile, recruitment) | NMFS program fund | Biological, Habitat, Oceanographic | Acoustic Backscatter, CTD, Multibeam, Side Scan, Single Beam, Sonar | 60 | 290 |

Figure 24 - Interactive Report Sample Filter Results